

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/007339

A. CLASSIFICATION OF SUBJECT MATTER G01N30/86 H01J49/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) G01N H01J		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, INSPEC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BRAKSTAD F: "The feasibility of latent variables applied to GC-MS data" CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS, ELSEVIER SCIENCE PUBLISHERS B.V. AMSTERDAM, NL, vol. 29, no. 2, October 1995 (1995-10), pages 157-176, XP004037860 ISSN: 0169-7439 page 160, right-hand column - page 162; figure 1	1,2, 17-19, 23,24
A	SKÖLD K ET AL: "A NEUROPROTEOMIC APPROACH TO TARGETING NEUROPEPTIDES IN THE BRAIN" PROTEOMICS, vol. 2, no. 4, 2002, pages 447-454, XP009038781 cited in the application pages 449-450; figures 3,4	1-24
-/-		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed </div> <div style="width: 45%;"> *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *B* document member of the same patent family </div> </div>		
Date of the actual completion of the international search <div style="text-align: center;">3 February 2006</div>	Date of mailing of the international search report <div style="text-align: center;">14/02/2006</div>	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <div style="text-align: center;">Loiseleur, P</div>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MINAMINO N ET AL: "Determination of endogenous peptides in the porcine brain: possible construction of Peptidome, a fact database for endogenous peptides" JOURNAL OF CHROMATOGRAPHY B: BIOMEDICAL SCIENCES & APPLICATIONS, ELSEVIER, AMSTERDAM, NL, vol. 792, no. 1, 15 July 2003 (2003-07-15), pages 33-48, XP004431812 ISSN: 1570-0232 pages 35-36</p>	1-24
A	<p>US 5 175 430 A (ENKE ET AL) 29 December 1992 (1992-12-29) the whole document</p>	1-24

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Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5175430	A	29-12-1992	AT 186985 T	15-12-1999
			DE 69230333 D1	30-12-1999
			DE 69230333 T2	24-08-2000
			EP 0540720 A1	12-05-1993
			JP 3091866 B2	25-09-2000
			JP 6500181 T	06-01-1994
			WO 9220435 A1	26-11-1992
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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
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MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
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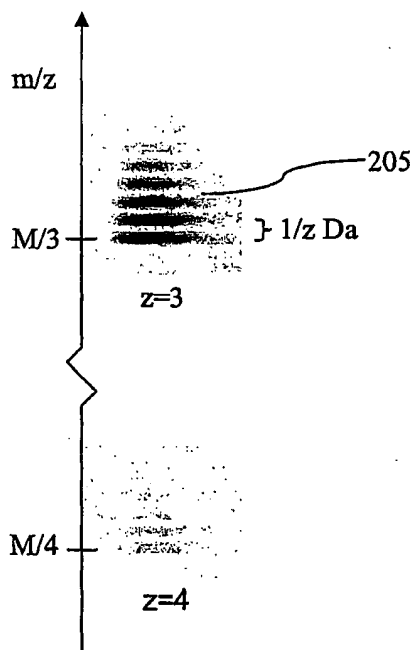
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(54) Title: METHODS AND SYSTEMS FOR THE ANNOTATION OF BIOMOLECULE PATTERNS IN CHROMATOGRAPHY/MASS-SPECTROMETRY ANALYSIS



(57) Abstract: The method and measurement system according to the in-
vention performs combined Chromatography and Mass Spectrometry analy-
sis and comprises the steps of: performing an C/MS analysis (300); generat-
ing at least one first elution profile (305), wherein one dimension is an elu-
tion time of the chromatography, and one dimension is mass to charge ratio
(m/z), and at least one dimension a signal intensity, and the signal from each
biomolecule species is dispersed forming a plurality of signal peaks associated
with each biomolecule species in the elution profile; and reassembling (310)
the dispersed signal originating from one biomolecule species in the elution
profile. The reassembling comprises an automated annotation adapted to re-
assemble signal variations in the elution profile that originate from the same
biomolecule species and generating a biomolecule map. The automated an-
notating is simultaneously based on both the elution time-dimension and the
m/z-dimension.